

# USCMS Engineer Status Report for June 2003

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## 1 Work Performed This Month

- The UAF was released in its final form: Monday 23 June 2003: (together with Igor, joe, lisa) Changes from the prototype version that has been running for quite a while: - the redhat 7 nodes are managed by rocks, I did the validation of the configuration. The Linux configuration is modelled after the cms desktop wg to be more suited for development and interactive work. The redhat 6 systems are not managed by rocks.

- Users can't log in directly into the nodes.

- queues were completely reconfigured

Documentation was provided on the web:

[http://www.uscms.org/scpages/general/users/farm/CMS\\_UAF.html](http://www.uscms.org/scpages/general/users/farm/CMS_UAF.html) This web page was updated continually to include better examples as well as to react to user comments. As soon as there is a working orca version the examples will include orca jobs. Presentations were given at:

- CMS jets/met meeting Wednesday 25 June 2003: <http://agenda.cern.ch/fullAgenda.php?ida=a>

- Fermilab CMS group analysis meeting: Tuesday 24 June 2003:

- USCMS facilities meeting: The presentations were well received. We received quite a few requests for accounts afterwards. Currently about 60 users have accounts on the cluster.

From the logs of work performed on the farm in the last 2 weeks: H. Wenzel: The farm is working. Currently only hotdog 53 and 60 are down (reason hardware/networking problems, needs hardware call) The /etc/passwd file on nodes popcrn 19,20,29,30,40 was modified to correpond to the rest of the farm. Without the modification starting jobs would fail and causing the bmgr to hold the nodes. The nodes were released and seem to work fine The fbs launcher didn't start on hotdog 59 ( cause automounted /storage

disk). The launcher was started by hand. Igor Mandrichenko implemented some of the requested improvements: - now the process times out when there is no interactive slot available. Currently he time out is set to 60 seconds. - now all batch jobs are submitted with a default nice level of 5. The user can increase the nice level. The default nice level for interactive processes is 0. The following file were modified: \$FBSNG\_DIR/bin/submit.py, \$FBSNG\_DIR/bin/exec.py, - The farm configuration was changed: now an interactive job doesn't count against the CPU resource provided by a node. Instead interactive processes are just counted allowing up to 4 interactive processes per node. - the rup-rpm was installed on bigmac to allow for collecting the load balancing info from the farm nodes using the RRD tool. - Igor added the graphs which now can be viewed on the web. We need to do some work to make it even nicer. but all the tools (RRD,rup) were installed. - on request current versions of comphep were installed on the farm.I provided instructions how to run comphep. At the moment the farm is used for comphep production. Will create examples how to run comphep in the CMS context.

The usual odd things I did: - deal with user accounts. - install a few desktops. - procard purchases, filled out purchase reqs. .... - collect requests from the users - met with helpdesk .. - helped setting up webpages for geant 4 tutorial: - dealt with users e.g. provide examples ..... - installed fermilab redhat 9 on a dektop and am now in the process of modifying the cms dektop workgroup for redhat 9. Probaly redhat 9 will not be relevant for cms but since now the forma of kickstart files was changed to xml this might be a good time to play with it. - getting ready for testing opteron system which is lanned to arrive in july. Terefore I installed different benchmarks on a test machine to be ready when the opteron based finally comes. Besides tests of the computing power memory bandwith tests will be interesting since the memory architecture with differnt channels for each processors promises speeds up to 5.33 GB/s for each processor.

## 2 Resources Needed

More administor main power for the user facility.

### **3 Links To Supporting Documentation**

- [http://www.uscms.org/scpages/general/users/farm/CMS\\_UAF.html](http://www.uscms.org/scpages/general/users/farm/CMS_UAF.html)
- <http://agenda.cern.ch/fullAgenda.php?ida=a031919>